

# **Contents of Volume 47**

## Number 1

- l Obituary-Professor Cornelis Teunis de Wit (1924-1993)
- 1 Combined Use of Watershed, Aquifer and Crop Simulation Models to Evaluate Groundwater Recharge through Percolation Ponds M. SELVARAJAN, A. K. BHATTACHARYA (India) & F. W. T. PENNING DE VRIES (The Netherlands)
- 25 The Management Factor in Developing-Country Agriculture: Argentina M. GALLACHER (Argentina)
- 39 Economic Analysis of the Long-Term Consequences of Farming Practices in the Barley Cropping Area of Jordan D. HUGHES, W. BUTCHER (USA), A. JARADAT (Jordan) & W. PENARANDA (USA)
- 59 The Economic Potential of a Small Scale Flow-Through Tank System for Trout Production C. M. GEMPESAW II, J. R. BACON, I. SUPITANINGSIH & J. HANKINS (USA)
- 73 An Integrated Model for Growth and Nutritional Value of Timothy A.-M. GUSTAVSSON (Sweden), J. F. ANGUS (Australia) & B. W. R. TORSSELL (Sweden)
- 93 Predictions of Growth and Nutritional Value of Forage Leys with a Dynamic Model A.-M. GUSTAVSSON (Sweden)
- 107 Participatory Rural Appraisal Design: Conceptual and Process Issues L. M. WEBBER (Australia) & R. L. ISON (UK)
  - i Papers Published in Volumes 44-46

# Number 2

- 133 Models of Sorghum and Pearl Millet to Predict Forage Dry Matter Production in Semi-arid Mexico. 1. Simulation Models A. D. BAEZ-GONZALEZ & J. G. W. JONES (UK)
- 147 Models of Sorghum and Pearl Millet to Predict Forage Dry Matter Production in Semi-arid Mexico. 2. Regression Models A. D. BAEZ-GONZALEZ & J. G. W. JONES (UK)
- 161 Farming Systems Research and Rural Poverty: Relationships between Context and Content S. D. BIGGS (UK)
- 175 An Integrated Approach to Assessing the Farm and Market Level Impacts of New Technology Adoption in Australian Lamb Production and Marketing Systems: The Case of Large, Lean Lamb G. R. GRIFFITH, D. T. VERE & B. W. BOOTLE (Australia)
- 199 Empirical Evidence of Mechanization Effects on Smallholder Crop Production Systems in Botswana A. PANIN (Botswana)
- 211 Projects, Politics and Professionals: Alternative Approaches for Project Identification and Project Planning D. HULME (UK)

- 235 An Approach to Prediction of Feed Intake in Growing Pigs Using Simple Body Measurements C. T. WHITTEMORE, J. C. KERR & N. D. CAMERON (UK)
- 245 A Decision Support System for Rapid Assessment of Lowland Rice-based Cropping Alternatives in Thailand A. JINTRAWET (Thailand)

## Number 3

- 259 The Management, Funding and Organisational Structure of Agricultural R&D in Zimbabwe, Malawi and South Africa. Part I—Management and Funding P. A. DONOVAN (South Africa)
- 273 The Management, Funding and Organisational Structure of Agricultural R&D in Zimbabwe, Malawi and South Africa. Part II—Organisational Structure P. A. DONOVAN (South Africa)
- 291 Constraints Limiting Innovation Adoption in the North Queensland Beef Industry. I: A Socio-economic Means of Maintaining a Balanced Lifestyle B. R. FRANK (Australia)
- 323 Constraints Limiting Innovation Adoption in the North Queensland Beef Industry. II: Non-adoption is an Intelligent Response to Environmental Circumstances B. R. FRANK (Australia)
- 347 The Economics of Recently Introduced Village Cattle Production in a Tsetse Affected Area (I): Trypanotolerant N'Dama Cattle in Zaire
  P. ITTY (Switzerland), G. J. ROWLANDS (Kenya), M. MINENGU, S. NGAMUNA, F. VAN WINKEL (Zaire) & G. D. M. D'IETEREN (Kenya)

#### Number 4

- 367 An Economic Evaluation Methodology for Smallholder Maize Research and Extension: Zimbabwe J. A. MACMILLAN (Canada), G. MUDIMU, J. F. MACROBERT, L. RUGUBE, E. GUVEYA, L. T. MUTEMERI, K. CHAKANYUKA (Zimbabwe) & B. JOHNSTON (Canada)
- 387 Potential Productivity and Human Carrying Capacity of an Agro-Ecosystem: An Analysis of Food Production Potential of China M. CAO (UK), S. MA & C. HAN (China)
- 415 Modelling the Requirement of the Young Growing Pig for Dietary Protein C. T. WHITTEMORE (UK)
- 427 A Simulation Study of Sugar Cane Harvesting R. SEMENZATO (Italy)
- 439 The Role of Modelling in the Quest for Sustainable Farming Systems S. PANDEY & J. B. HARDAKER (Australia)
- 451 Introducing Awassi Sheep to Australia: an Application of Farming System Models R. S. KINGWELL, A. K. ABADI GHADIM, S. D. ROBINSON & J. M. YOUNG (Australia)
- 473 The Economics of Recently Introduced Village Cattle Production in a Tsetse Affected Area (II): Trypanotolerant Cattle in Southern Togo P. ITTY (Switzerland), G. J. ROWLANDS (Kenya), G. MORKRAMER (Germany), A. DEFLY (Togo) & G. D. M. D'IETEREN (Kenya)
- 493 Contents of Volume 47

